

Docket No.: 296905US28PCT/pta

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Hiroshi SAWADA, et al.

SERIAL NUMBER: 10/594,983

GROUP: 2857

FILED: September 29, 2006

EXAMINER: SUAREZ, FELIX E.

FOR: SIGNAL SEPARATING APPARATUS, SIGNAL SEPARATING METHOD,
SIGNAL SEPARATING PROGRAM AND RECORDING MEDIUM

COMMENTS ON STATEMENT OF REASONS FOR ALLOWANCE

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SIR:

Applicants acknowledge with appreciation the indication of allowability of the claimed invention. In response to the Examiner's Statement of Reasons for Allowance in the Notice of Allowance of August 10, 2009, Applicants respectfully submit the following comments.

In the Examiner's Statement of Reasons for Allowance on pages 2 through 4 of the Notice of Allowance mailed August 10, 2009, paragraph 3 states in part:

Claims 4-21 and 28, are allowable because the closest prior art, Sawada et al. [U.S. Patent No. 7,039,546], does not apply in view of, assignment to, the same inventors (Hiroshi Sawada, Ryo Mukai, Shoko Araki and Shoji Makimo) at the time this invention was made; see Applicant's statement filed 05/04/2009.

Further Erten, fail to anticipate or render obvious a signal separating apparatus which separates mixed signals consisting of a mixture of source signals originated from a plurality of signal sources into the source signals, comprising:
a basis vector normalizing section which normalizes basis vectors constituting the generalized inverse matrix to obtain normalized basis vectors; in combination with all other limitations in the claim(s) as claimed and defined by applicant.

Claims 22-27 and 30, are allowable because the closest prior art, Sawada et al. [U.S. Patent No. 7,039,546], does not apply in view of, assignment to, the same inventors (i.e., Hiroshi Sawada, Ryo Mukai, Shoko Araki and Shoji Makimo)

at the time this invention was made; see Applicant's statement filed 05/04/2009.

Further Erten, fail to anticipate or render obvious a signal separating apparatus which separates mixed signals consisting of a mixture of source signals originated from a plurality of signal sources into the source signals, comprising:

a separated signal generating section which extracts a predetermined ordinal number-th element of the mixed-signal vector corresponding to the time-frequency of the normalized vector that belongs to the k-th cluster and generates a separated-signal vector having the element as the k-th element; in combination with all other limitations in the claim(s) as claimed and define by applicant.

Claim 29, is allowable because the closest prior art, Sawada et al. [U.S. Patent No. 7,039,546] does not apply in view of, assignment to, the same inventors (i.e. Hiroshi Sawada, Ryo Mukai, Shoko Araki and Shoji Makimo) at the time this invention was made; see Applicant's statement filed 05/04/2009.

Further Erten, fail to anticipate or render obvious a signal separating apparatus which separates mixed signals consisting a mixture of source signals originated from a plurality of signal sources into the source signals, comprising:

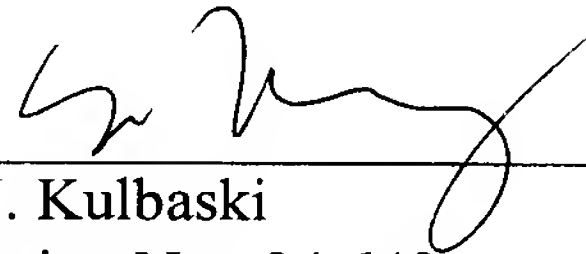
normalizing basis vectors which are columns of a generalized inverse matrix of the inputted separation matrix, clustering the normalized basis vectors, and selecting selection signals including a target signal from among the inputted separated signals by using variance of the clusters as an indicator; in combination with all other limitations in the claim(s) as claimed and defined by applicant.

Although the above comment seems to be directed to Claims 4, 10 and 22, it is respectfully submitted that independent Claims 11, 28, 29 and 30 do not include all of the elements recited above. For example, Claim 11 recites "a target signal selecting section" and not "a basis vector normalizing section," Claims 28, 29 and 30 recite a "signal separating method" and not "a signal separating apparatus," Claim 28 further recites the step of "normalizing basis vectors" and not "a basis vector normalizing section" and Claim 30 further recites the step of "extracting a predetermined ordinal number" and not "a separated

signal generating section.” Accordingly, it is respectfully submitted that the above quoted statement applies only to independent Claims 4, 10 and 22 (and claims dependent therefrom), and not to independent Claims 11, 28, 29 and 30 (and claims dependent therefrom), to the extent the language used in the statement differs from the language of the claims.

Respectfully Submitted,

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